

Pressure switch with adjustable change-over switch

Type DV7.1

up to **1000 bar**

Functional principle

Piston type hydromechanical pressure switch with one change-over switch, easily adjustable over the entire pressure range, with scale for presetting of the pressure switching point.

7 pressure ranges for the optimal adaptation to any operating pressure.

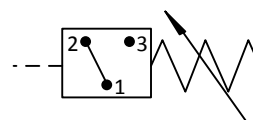


Features

- Designed for rough operating conditions
- Insensitive to hydraulic overloads
- Specially developed piston seal
- Housing made of anodized aluminium
- Degree of protection IP 65
- Instrument plug according DIN EN 175301
- Rotatable under pressure around the longitudinal axis
- Very high operational safety
- Insensitive to EMV and no power supply is necessary

Damping

For the protection of the pressure switch we recommend the installation of a damping element as for example a throttle screw with double fitting according to the table below.



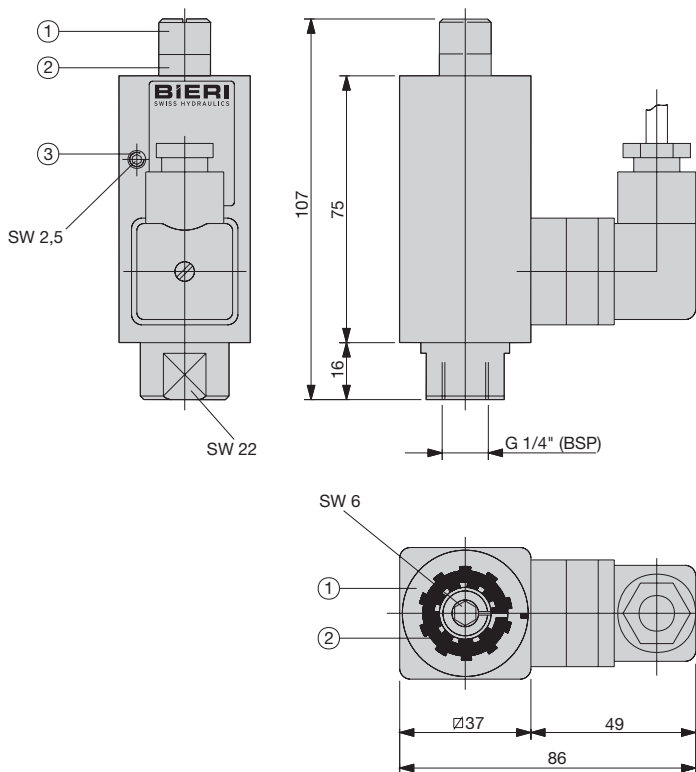
Technical specifications

Hydraulic fluid	mineral oil according to DIN 51524 (other fluid on request)
Temperature range Medium	-20 to 80 °C
Ambient temperature range	-30 to 50 °C
Viscosity range	5 to 400 mm ² / s
DIN appliance plug connection (3P + GND)	according to EN 175301-803
Mounting position	arbitrarily
Appliance plug	rotatable about 4 x 90°
Switching hysteresis of the scale end value	2 - 10%
Repeat accuracy of the scale value	1%
Degree of protection	IP 65
Insulations class	I
Accuracy class	4.0
Materials	housing: aluminium anodized

Product information

Type		Pressure [bar]	Overload max. [bar]	Part no.
DV7.	60.33006	60	130	3658044
DV7.	100.33010	100	360	3658055
DV7.	180.33018	180	360	3665354
DV7.	250.33025	250	500	3658058
DV7.	400.33040	400	800	3665378
DV7.	600.33060	600	1200	3665379
DV7.	1000.33100	1000	1200	3641450

Dimension drawing

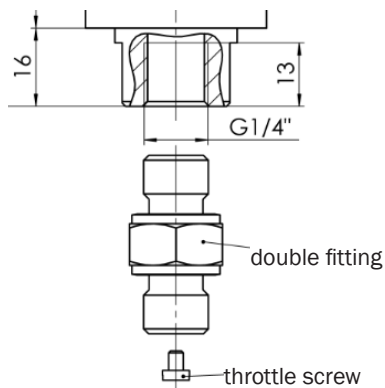


Setting of the switching point

- (1) Bright scale-/spindle part
 - (2) Dark scale-/spindle part
 - (3) Spindle locking
- Loosen the spindle locking (3)
 - Combine the dark scale part (2) with the dark spindle part (2) for lower pressure setting and the bright scale part (1) with the bright spindle part (1) for upper pressure setting
 - Tighten the spindle locking (3)



Hydraulic connection



Type	double fitting G 1/4" - G 1/4" part no. 3683718		double fitting G 1/2" - G 1/4" part no. 3683678		
	throttle screw Ø [mm]	part no.	throttle screw Ø [mm]	part no.	
DV7.	60.33006	0.5	3688099	0.5	3688096
DV7.	100.33010	0.5	3688099	0.5	3688096
DV7.	180.33018	0.5	3688099	0.5	3688096
DV7.	250.33025	0.5	3688099	0.5	3688096
DV7.	400.33040	0.2	3688087	0.2	3688059
DV7.	600.33060	0.2	3688087	0.2	3688059
DV7.	1000.33100	0.2	3688087	0.2	3688059

Changeover contact switch

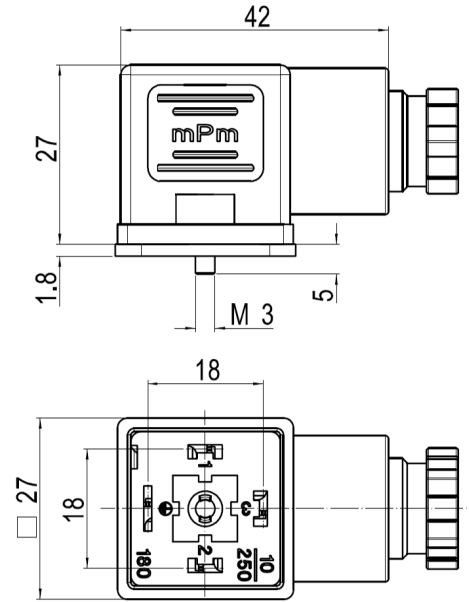
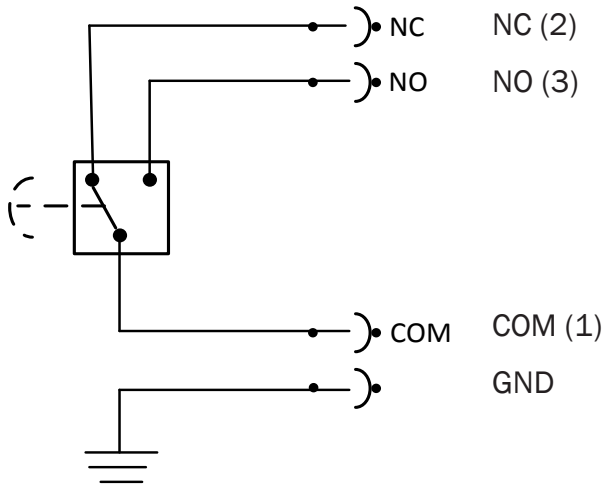
Electrical switching capacity

According to EN IEC 60947-5-1 : 2018

Material switch contacts	pure silver (Ag 999)
AC-15	2 A / 125 V... 250 V
Rated insulation voltage	250 V
Rated impulse withstand voltage	2.5 kV
Pollution degree	3
Short-circuit protection device: Cylindrical fuse holder with	10 A gG fuse
Conditional short circuit current	100 A
Height above sea level	2000 m
ENEC	250 VAC 10 (3) A, 1E4 A
UL/CSA	250 VAC 10.1 A

Cable plug according to DIN EN 175301 - 803

PIN assignment of the connector



General information

Connecting lead - Ø	6.00 - 8.00 mm
Connection cross section max.	1.5 mm ²
Position ground contact	H12
Material connector casing	PA6 black
Material flat gasket	NBR
Material plug contacts	Silver (Ag)
Cable gland	PG 9
Outlets	3 poles + GND

Bieri Hydraulik AG

Könizstrasse 274
 CH-3097 Liebefeld
 Tel. +41 31 970 09 09 | Fax +41 31 970 09 10
 info@bierihydraulics.com | www.bierihydraulics.com
 4/4

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

DV7-1_10000548330_EN_42L22